

**ABSTRACT**

A method for producing composite images of real images and computer-generated 3D images uses camera-and-lens sensor data. The real images can be live, or pre-recorded, and may originate on film or video. The computer-generated 3D images are generated live,  
5 simultaneously with the film or video and can be animated or still based upon pre-prepared 3D data. A live image, which may be preview-quality is generated on the video or film production set, and the information gathered from the sensors is stored to allow a high-quality composite to be generated in post-production. Due to the use of sensor data, an accurate simulation of depth-of-field and focus can be generated.

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